

7 Financial Analysis

This chapter presents a summary of the financial analysis for the Locally Preferred Alternative (LPA) and Locally Requested Capital Investments (LRCIs), as described in Chapter 2. This chapter also includes a description of the local funding partners and the capacity of the partners to fund the LPA and LRCIs. This chapter includes the following sections:

- 7.1 Capital Funding Strategy
- 7.2 Operating Funding Strategy
- 7.3 Risk Analysis
- 7.4 New Starts Rating

7.1 Capital Funding Strategy

This section describes the basis of the capital cost estimate, the methodology used to develop the capital cost estimates, and the year-of-expenditure cost estimates and funding plan for the LPA and LRCIs.

7.1.1 Basis of the Capital Cost Estimate

The capital cost estimate included in this financial analysis for the LPA and LRCIs was developed based on the Preliminary Engineering Plans (see Appendix E and Section 2.1).

7.1.2 Methodology

The year-of-expenditure (YOE) capital cost estimates were developed using the Federal Transit Administration (FTA) Standard Cost Category (SCC) workbook.¹ The YOE capital cost estimates for the light rail components of the LPA are based on quantity measurements from the Preliminary Engineering Plans and unit costs derived from local and national sources. The YOE capital cost estimate is based on an annual inflation rate of 3 percent (see Section 2.3 for the LPA base year cost estimates).

7.1.3 Year-of-Expenditure Capital Cost Estimates

Capital cost estimates for the LPA are in YOE dollars and are shown in Table 7.1-1. YOE capital cost estimates for the LRCIs are shown in Table 7.1-2. The cost estimates will be refined during the Engineering phase. A description of the plan for funding the LPA and LRCIs, which will be funded separately, is provided in Section 7.1.4

TABLE 7.1-1
YOE Capital Cost Estimate for the LPA, by FTA Standard Cost Category (millions)^a

FTA Standard Cost Category	YOE Capital Cost (millions)
Guideway & Track Elements	\$383.665
Stations, Stops, Terminals, Intermodal	\$70.110
Support Facilities: Yards, Shops, Administration Buildings	\$89.769
Sitework and Special Conditions	\$174.224
Systems	\$238.339
Right-of-Way, Land, Existing Improvements	\$211.191
Vehicles	\$126.370
Professional Services	\$276.381
Unallocated Contingency	\$165.704
Finance	\$55.000
Total	\$1,790.754

^a Does not include LRCIs.

Source: Council, 2016.

¹ See http://www.fta.dot.gov/12305_15612.html.

TABLE 7.1-2
 YOE Capital Cost Estimates for LRCIs (YOE dollars, in thousands)

Jurisdiction / LRCIs	YOE Costs (thousands)
Eden Prairie	
LRCI #1 N-S Roadway	\$2,026
LRCI #2 Trail from Golden Triangle Station	\$1,043
LRCI #3 SouthWest Station Trail	\$1,255
LRCI #4 Catenary Poles	\$817
LRCI #5 Decorative Street Lighting	\$139
LRCI #6 Decorative Fencing and Bridge Railing	\$1,753
LRCI #7 Planter Boxes	\$425
LRCI #8 Bridge Aesthetics Upgrade	\$1,996
LRCI #9 Embedded Track	\$627
LRCI #10 Public Plaza at Stations	\$1,300
LRCI #11 Technology Drive Extension	\$128
Minnetonka	
LRCI #12 Extension of 17th Avenue	\$484
LRCI #13 Guideway Profile Adjustment	\$1,452
Hopkins	
LRCI #14 17th Avenue Water Main and Sewer	\$145
St. Louis Park	
LRCI #17 Xenwood Avenue Underpass	\$4,947
LRCI #32 Beltline Blvd/CSAH 25 Improvements	\$1,328
Hennepin County	
LRCI #26 New Trail between Light Rail Transit Tracks and CSAH 61	\$1,690
LRCI #27 Fiber Optic Conduit	\$7,818
Total	\$29,305

Source: Council, LRCI cost estimates September 2015.

7.1.4 Capital Funding

The Metropolitan Council 2040 Transportation Policy Plan (TPP) is based on the assumption that for rail projects, the region will secure federal New Starts funds for 50 percent of the cost. For the LPA, the remaining 50 percent of the cost is proposed to be funded from the following sources: 9.2 percent from the State of Minnesota; 27.7 percent from the Counties Transit Improvement Board (CTIB); 9.2 percent from Hennepin County Regional Railroad Authority (HCRRA); 3.7 percent from additional local contributions; and 0.2 percent from the Federal Surface Transportation Program (see Table 7.1-3).

TABLE 7.1-3
 LPA Capital Cost Funding by Source (year of expenditure dollars, in millions)^a

Source	Share	Contribution
Federal Transit Administration ^b	50.0%	\$895
State of Minnesota	9.2%	\$165
Counties Transit Improvement Board	27.7%	\$496
Hennepin County Railroad Authority	9.2%	\$165
Other Local Funding	3.6%	\$65
Federal Surface Transportation Program	0.2%	\$4
Total	100%	\$1,791

^a Does not include LRCIs.

^b Source: Council, 2016.

The funding sources for LRCI costs, which could be federal non-New Starts or local sources, are the responsibility of the LRCI sponsors. LRCI sponsors have committed funds for design and environmental activities. Following the opening of construction bids, LRCI sponsors will need to commit funds for construction if they wish to proceed with implementing the LRCIs.

Following is additional information on funding from New Starts, the State of Minnesota, CTIB, and HCRRA.

7.1.4.1 Federal Section 5309 Capital Investment Grant Program

The Federal Section 5309 Capital Investment Grant Program, under which the Project qualifies as a New Starts project, is anticipated to provide 50 percent of the LPA funding. The Council submitted a New Starts submittal as part of the request to advance into Preliminary Engineering (now known as Project Development) in 2010. A New Starts submittal update was submitted in September 2014 followed by another update in August 2015. The FTA 2016 proposed budget included a recommendation for a Full Funding Grant Agreement for the Southwest Light Rail Transit (LRT) Project, including funding for the first-year installment of \$150 million.

7.1.4.2 Counties Transit Improvement Board

The principal local funding source for the LPA, and a source of transit funding stability in the region, is the CTIB. It typically funds up to 30 percent of the capital cost of rail transit projects. CTIB is currently anticipated to fund approximately 27.7 percent of the LPA cost. The CTIB was authorized by the legislature and confirmed by five counties in March and April 2008. After the legislation was enacted, boards of eligible counties in the metropolitan region were required to vote whether or not to levy the tax and join the Joint Powers Board. Anoka, Dakota, Hennepin, Ramsey, and Washington Counties voted to join the Board, thus fulfilling the legislative requirement that at least two counties enact the tax in order to create the Board.

According to the enabling legislation, the purpose of the CTIB is to allocate the transit tax funds to transit purposes in member counties. The CTIB has independent bonding authority, with the transit tax as security, and counties that join must keep collecting revenues even if they choose to leave the board, until all obligations made while they were members are repaid.

The Board may fund any project it chooses, so long as it: 1) is within the taxing district; 2) is consistent with the regional long-range transit plan established by the Metropolitan Council; and 3) does not infringe upon any small county's minimum funding guarantee (which guarantees that any member is guaranteed to receive at least 1 percent of total sales tax proceeds for fiscal year 2009, 2010, 2011, and 2012).

The Board's membership includes representatives of each member county as well as a representative of the Metropolitan Council. The criteria for grant awards include: (1) being consistent with Council's TPP; (2) adhering to transitway purposes; and (3) granting each of its county members at least 1 percent of total sales tax proceeds for fiscal year 2009, 2010, 2011, and 2012.

7.1.4.3 State of Minnesota

The State of Minnesota historically funds up to 10 percent of the capital cost of rail transit projects. The State is currently anticipated to fund approximately 9.2 percent of the LPA cost through a combination of a new transit sales tax, bonding, or appropriations. It is anticipated that the bonds will be general obligation debt to fund its share of the capital plan. The state of Minnesota has earned the following ratings from the three rating services: Aa1 from Moody's, AA+ from Standard & Poor's, and AA+ from Fitch.

7.1.4.4 Regional Railroad Authorities

Regional Railroad Authorities (RRAs) are established as political subdivisions of the state under Minnesota Statutes 398A. RRAs have powers similar to the county for the specific purpose of providing for the planning, preservation, and improvement of rail service including passenger rail service and to provide for the preservation of abandoned rail right-of-way for future transportation uses. RRAs have the authority to levy a property tax up to 0.04835 percent of the market value of all taxable property within the county. RRAs are also authorized to issue debt under chapter 398A.

HCRRA obtains its funds from a property tax levied under the authority of Minnesota Statute 398A, plus interest earned on balances. The HCRRA is currently anticipated to fund approximately 9.2 percent of the

LPA cost. This tax is distinct from the Metropolitan Council's property tax authority. The tax was levied in the amount of \$18,000,000 for the 2012 budget year, which is considerably less than the levy limit established in Minnesota Statute 398A, which would yield approximately \$70,500,000 per year.

7.2 Operating Funding Strategy

This section provides a summary of the LPA's estimated operations and maintenance (O&M) costs and proposed revenues. All increases in O&M costs will result from the LPA and there will be no additional O&M costs as a result of LRCIs.

7.2.1 Operations and Maintenance Costs

Operating and maintenance cost estimates of the 2040 No Build Alternative and LPA were generated by using the same methodology presented in the *Southwest Light Rail Transit (LRT) Service Plan Updates and Operations and Maintenance Cost Results for the Final EIS* (July 2015), with the addition of the METRO Blue Line extension and METRO Orange Line (bus rapid transit – BRT)². Table 7.2-1 presents estimates of No Build Alternative and LPA operating and maintenance cost estimates in 2040 dollars based upon an inflation rate of 3.15 percent. In 2016 dollars, the annual incremental systemwide O&M cost with the LPA is estimated to be \$39.45 million more than it would be under the No Build Alternative, increasing from approximately \$661.54 million to \$700.1 million (see Section 2.4). In YOE dollars, O&M costs for the LPA are estimated to be approximately \$83.1 million higher than under the No Build Alternative, increasing from approximately \$1,392.59 million to \$1,475.63 million (see Table 7.2-1).

TABLE 7.2-1

Annual Systemwide Operations and Maintenance Costs in 2040: No Build Alternative and LPA (2040 dollars, in millions)^a

Operator/ O&M Cost Category	No Build Alternative ^b	LPA ^c
Metro Transit/Metropolitan Transportation Services^d		
Light Rail	\$188.13	\$246.00
Bus	\$979.81	\$984.66
Northstar	\$39.86	\$39.86
Paratransit (Metro Mobility and Transit Link)	\$147.32	\$147.32
Subtotal	\$1,355.12	\$1,417.84
SouthWest Transit		
Bus	\$37.461	\$57.792
Subtotal	\$37.461	\$57.792
Systemwide		
Total (all modes)	\$1,392.59	\$1,475.63

^a Source: Council, Metro Transit Finance Department, Financial Management Plan, Revision 02-00, August 2015.

^b The No Build Alternative includes the METRO Blue Line extension and METRO Orange Line. O&M cost estimates for these two transitways are from Metro Transit Finance Department, Financial Management Plan, Revision 02-00, August 2015.

^c No additional O&M costs will be incurred as a result of LRCIs.

^d Includes all Twin Cities suburban transit authorities and contracted providers, except for SouthWest Transit, which is accounted for separately in the table.

Source: Southwest LRT Financial Analysis in Support of the Final EIS, September 2015. Escalated 3.15 percent annually.

7.2.2 Operating Revenues

Operating revenues come from various sources are described below and summarized in Table 7.2-2. The transit operating revenues under the LPA³ would include fare revenues, state general funding, and CTIB funding. The funding for the O&M costs for the LPA comes first from the fare revenues, the remaining costs

² The No Build Alternative includes the METRO Blue Line extension and METRO Orange Line. O&M cost estimates for these two transitways are from Metro Transit Finance Department, Financial Management Plan, Revision 02-00, August 2015.

³ Applies to LRT O&M costs only.

are split 50 percent state general funds and 50 percent CTIB. Minnesota Sessions Laws (2008) Section 473.4051 subd. 2 states that after operating revenue and federal money have been used to pay for light rail operations, 50 percent of the remaining balance must be paid by the State of Minnesota (Minnesota Session Laws, 2008, Regular Session, Chapter 365 – House File No. 4072). State funding for transit operations is derived from general fund appropriations, and is appropriated by the state legislature on a biennial basis.

TABLE 7.2-2

Annual Systemwide O&M Revenue in 2040: No Build Alternative and LPA (2040 dollars, in millions)

Operator Operating & Maintenance Cost and Revenue Category	No Build Alternative	LPA
Metro Transit/Metropolitan Transportation Services^b		
Total O&M Cost	\$1,355.12	\$1,417.84
Revenue		
Fares	\$314.17	\$336.86
Motor Vehicle Sales Tax	\$779.30	\$779.30
CTIB	\$57.90	\$76.83
Other Revenue	\$18.29	\$19.36
Local Operating Assistance	\$5.25	\$5.25
Federal Operating Assistance	\$15.24	\$15.24
State Operating Assistance	\$164.92	\$183.85
Interest on Operation Balance	\$1.13	\$1.13
Total Metro Transit Revenue^c	\$1,355.12	\$1,417.84
SouthWest Transit		
O&M Cost	\$37.46	\$57.79
Revenue^d		
Fares	\$10.22	\$15.66
Motor Vehicle Sales Tax	\$24.73	\$24.74
Advertising and Concessions	\$0.35	\$0.35
Interest on Investments	\$0.03	\$0.03
Miscellaneous Other	\$0.07	\$0.07
Other Regional Revenue Source to be Determined	\$2.06	\$16.94
Total SouthWest Transit Revenue	\$37.46	\$57.79
TOTAL METRO TRANSIT/MTS/SOUTHWEST TRANSIT COSTS AND REVENUES	\$1,392.59	\$1,475.63

^a No additional O&M costs will be incurred as a result of LRCIs.

^b Includes all Twin Cities suburban transit authorities and contracted providers, except for SouthWest Transit, which is accounted for separately in the table.

^c Source: Council, Metro Transit Finance Department, Financial Management Plan, Revision 02-00, August 2015. Figures shown have been rounded.

^d Source: Southwest LRT Technical Report, Service Plan Updates, and O&M Cost Results for the Final EIS, July 2015.

Source: Southwest LRT Technical Report, Financial Analysis in Support of the Final EIS, August 2015.

7.2.2.1 Fare and Motor Vehicle Sales Tax Revenues

Fare revenues are received from the passengers for the use of the service. Ridership is anticipated to grow along with increasing population and employment in the corridor. The average operating revenue per passenger including cash fare and convenience fare such as 31-day pass revenue was \$0.96 for an LRT passenger, \$3.04 for a Northstar commuter rail line passenger, and \$1.14 for a bus passenger (including express bus premiums) in 2014. Metropolitan Council's policy is to increase fares by 10 percent whenever

inflating costs cause the farebox recovery ratio to drop below 28.5 percent.⁴ In October 2008, the Metropolitan Council implemented a fare increase in accordance with this policy; the base fare was increased to \$1.75, where it is today. Motor Vehicle Sales Tax (MVST) revenues are the largest source of local transit operating funds, accounting for approximately 36 percent of operating revenues in 2014.

7.2.2.2 Counties Transit Improvement Board Operating Funding

The CTIB, as described above under the Capital Plan Sources, has agreed to provide 50 percent of the net operating assistance required for the METRO Blue Line and METRO Green Line and Southwest LRT (METRO Green Line Extension), and 41.95 percent for the Northstar commuter rail line that began revenue service in November 2009.

7.2.2.3 Other Transit Related Operating Revenue

Historically, the Council has received other transit-related revenues that are generated by or for transit operations, which consist of advertising revenue, contract revenue, and other miscellaneous sources. These other transit-related revenues are projected to grow over time in proportion to the projected growth in transit operations.

7.2.2.4 State Operating Revenue

State funding for transit operations is derived from general fund appropriations and is appropriated by the state legislature on a biennial basis.

7.2.2.5 Federal Operating Revenue (FTA Section 5307 Urbanized Area Formula Grants)

Federal Operating Revenue (FTA Section 5307 urbanized area formula grants) is based on various demographic statistics, level of service, ridership, and operating cost variables. Factors in the formula that allocate grants to urbanized areas were estimated based on annual growth in total Moving Ahead for Progress in the 21st Century Act (MAP-21), Section 5307 funds.

MAP-21 limits the application of these Section 5307 grants to capital purposes, but an exception is made for maintenance expenses that protect the system's assets in the operating budget. One percent of these grants must be applied for "enhancements" as defined in the statute. The Financial Plan assumes that these grants are applied to preventative maintenance or to the agency-wide capital plan.

7.2.2.6 Interest Income

Interest income is derived from the interest earned on available funds at existing interest income rates.

7.3 Risk Analysis

The following three scenarios were tested in order to determine the ability of the region to withstand negative circumstances during the construction of the Southwest LRT Project. The detailed cash flows for each scenario are included as Appendices D, E, and F of the Project's Finance Plan (Council, August 2015). These can be compared to the base financial plan projection set on page 45 of the Project's Finance Plan. Across all scenarios, it is noteworthy that the financial structure of the Metropolitan Council Transportation Division and the Southwest LRT Project are dynamically resilient. The Southwest LRT Project is anticipated to be funded by local partners and the state in proportions of the non-Federal share. Furthermore, the Northstar, METRO Blue Line, METRO Green Line, and Southwest LRT operating cash flows are insulated from risk, because the operating deficit is anticipated to be funded by CTIB and the state. Similarly, the Opt Out program (systems that have elected to operate their own transit) present no financial risk to the Council. Even Metro Transit Bus, which is partially dependent on the Council's dedicated MVST funding, has been insulated by the Council's policy that the fares will be increased based on the farebox recovery ratio. This resilience is demonstrated in the aggressive tests of the plan in the following sections.

⁴ Farebox recovery ratio is the fraction of operating expenses which are met by the fares paid by passengers. It is computed by dividing the system's total fare revenue by its total operating expenses.

7.3.1 Scenario 1: Higher Than Expected Operations Inflation

This scenario tests the critical sector of Metro Transit's financial statements: its operating cash flows and reserves. Inflation of 3.5 percent per annum is applied to all operating expenses, instead of the 3.15 percent used in the project cost forecasts. As described above, the external funding for the Southwest LRT and the regional capital funding for the capital renewal and replacement program provide funding for these programs in case of cost increases; however, the Transportation Division's operating cash flows, particularly for the bus and Metropolitan Transit Services programs are more critical.

As stated previously, fare increases were assumed to be in 2017, 2019, 2021, 2024, 2028, and 2032. With the Operations Inflation Scenario, fare increases are assumed to be in 2017, 2019, 2021, 2023, 2026, 2030, and 2033. Furthermore, in the case of the transitway deficits, the state and CTIB operating assistance increase to exactly offset the increased deficit. However, we have assumed the MVST, federal section 5307 formula funds, and other operating revenue (primarily advertising and contract service) are not affected by the higher inflation. The final ending cash balance is reduced from \$792.64 million in the base case to \$540.97 million in this scenario.

Over the 21-year forecast period, total operating expenses increase by \$515.49 million. This is offset by \$184.80 million in passenger fares, state operating assistance of \$28.95 million, CTIB assistance of \$47.23 million, and local transitway assistance of \$2.84 million. At the end of 2035, the surplus generated by Operations is \$251.67 million lower than in the base case, but net revenues still exceed net expenses by \$540.97 million during the forecast period.

7.3.2 Scenario 2: Lower Than Expected MVST Receipts

This scenario assumes that motor vehicle sales tax will be below the current forecast. The current forecast is for MVST receipts to grow at 4.90 percent per annum, and for this scenario that rate has been dropped to 3.75 percent. Southwest LRT, METRO Blue Line LRT, and METRO Green Line LRT have their operations funded through farebox, State Appropriations, CTIB, and Local Operations Assistance. Bus operations and Northstar are funded through a combination of farebox, State Appropriation, and MVST. The reduction in MVST would not have any offset from any of the other sources. This scenario does not assume any additional new sources of revenue.

Over the 21-year forecast period, MVST is reduced by \$494.32 million. At the end of 2035, the surplus generated by Operations is \$494.32 million lower than in the base case, but net revenues still exceed net expenses by \$178.13 million for the forecast period. The final ending cash balance is reduced from \$792.64 million to \$298.32 million.

7.3.3 Scenario 3: Lower Than Expected Regional Property Tax Revenue

This scenario tests the Regional Property Tax Revenue Transit Asset Program. The Council levies a regional property tax, which is dedicated to funding a debt financed capital program. The outstanding debt in the program is serially financed and current debt service requirements are met from the property tax revenues. The net proceeds from the debt program are dedicated to funding the transit infrastructure programs and are shown in the cash flow projections as Regional Bonding. The current forecast is for Regional Property Tax Revenue to grow at 3.3 percent per annum, and for this scenario that rate has been dropped to 2.3 percent. The reduction in Regional Property Tax Revenue would not have any offset from any other source of revenue and will only impact the Capital Sources of Funds for the other capital programs, including Bus, METRO Blue Line, METRO Green Line, and Northstar. This scenario does not assume any additional new sources of revenue.

Over the 21-year forecast period, total capital sources of funding from Regional Bonding are decreased by \$104.99 million and Interest on Capital Balances by \$5.99 million. At the end of 2035, the surplus generated by capital cash balances is \$110.98 million lower than in the base case, but net capital sources of revenues still exceed capital expenses with a final ending cash balance of \$359.33 million. This will allow the Council to maintain and improve their Capital Improvement Program. This includes capital investments to assure that fixed assets remain in a state of good repair, the fleet is replaced in accordance with the fleet

management program, technological and other improvements are made to maintain and improve operating efficiency and effectiveness, and customer service and convenience is maintained and improved.

7.4 New Starts Rating

The Council is intending to seek Capital Investment Grant (CIG) Program funding from FTA for one or more of the alternatives examined in this NEPA document. The CIG program, more commonly known as the New Starts, Small Starts, and Core Capacity program, involves a multi-year, multi-step process that project sponsors must complete before a project is eligible for funding. The steps in the process and the basic requirements of the program can be found on FTA's website at <https://www.fta.dot.gov/>.

FTA must evaluate and rate proposed projects seeking funding from the CIG Program under a set of project justification and local financial commitment criteria specified in law. The criteria evaluate the merits of the project and the project sponsor's ability to build and operate it as well as the existing transit system. FTA assigns ratings from low to high based on information that project sponsors submit on the project cost, benefits, requested amount of CIG Program funds, and overall financial plan. Projects must receive a medium or better overall rating to advance through the steps in the process and be eligible for funding from the program. As projects proceed through the steps in the process, information concerning costs, benefits, and impacts is refined and the ratings are updated to reflect new information. Changes in federal law instituted by the Moving Ahead for Progress in the 21st Century Act (commonly known by the abbreviation MAP-21) will require FTA to evaluate and rate the project for federal funding after the completion of the NEPA process.

As reported in the *Proposed Allocation of Funds for Fiscal Year 2016: Capital Investment Grant Program (New Starts, Core Capacity and Small Starts)* (FTA, 2016), FTA has rated the Project as follows: Overall Project Rating = Medium-High; Project Justification Rating = Medium; and Local Financial Commitment Rating = Medium-High.